

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001311**Date Inspected:** 01-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Office, Tower, Lift 3 West, Lift 4 West, Misc**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Office

Attend to report writing and organization of project documentation.

Lift 3 West

Caltrans QA Lumley performed follow up inspection of internal surfaces, ZPMC fabrication personnel installing lifting coil rods and affixing to lifting lugs. Checked Side Plate areas and Upper Corner Unit areas all repairs incomplete. Base metal remains visible after re-abrasive blasting and re-application of Interzinc 22 operations, holidays, rust and active corrosion present and spent abrasive cleanup incomplete.

Lift 4 West

Internal surfaces were checked by Caltrans QA Lumley to ascertain if coating application was being performed by ZPMC. During inspection the ambient conditions were observed to be unsatisfactory for application. ZPMC personnel were on the internal areas of the Side Plates, Upper Corner Units, and Bottom Plate performing cleaning operations. The Transport Shirley's were present for transport of the lift elsewhere.

Meeting

SMR Skyler Guest requested a meeting with Caltrans personnel to review and discuss upcoming manufacturers self quality audit. Attendees were Sang Lee, Mark Miller, Skyler Guest, Jim Lumley, Bill Howe. It was noted that ZPMC's Sophisticated Paint Endorsement Certificate had expired as of September 30,2009 from the American Institute of Steel Construction (AISC).

SOURCE INSPECTION REPORT

(Continued Page 2 of 2)

OBG 6 AE

Internal and external base metal surfaces were re-washed and re-de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Tower Sub-Assembly

Double Diaphragm code# WSD1-119M was washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Lift 4 West

ZPMC requested a "Final" inspection on internal surfaces. It was discovered that some minor deficiencies required amendment which consisted of repairs to partially installed Angle iron pieces which are to be bolted to the lower section of the Floor Beam/Bottom Plates. Caltrans QA Lumley slid one aside to examine the underside of the Angle Iron and the Faying surfaces of the bolted connections to discover spent abrasive, contaminants, rust staining and active corrosion present. All of the Angle Irons which were not bolted or "pinned" exhibited the same condition. ZPMC to perform required repairs.

Miscellaneous Metal

Previously abrasive blasted and undercoated surfaces of approximately 80 pieces of Splice plates were returned from Trial Assembly area for repairs. Splice Plates were re-abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied.

Lift 3 West

ZPMC personnel were observed utilizing compressed air for "blow-down" and cleaning operations on internal surfaces. No inspection performed during this active work operation.

Lift 2 East

ZPMC personnel were observed cleaning and sanding the East Side Plate in preparation of application of Finish coat of Interfine 979. Workers were observed rinsing out wiping rags in rain puddles beneath the lift to clean rags then re-wiping external surfaces.

Note: A phone call was received from ABF Zhou Qusong informing Caltrans QA Lumley of updated inspection schedule for night time Inspections at 17:00 hours. Inspections requested were for 19:00 and 20:00 consecutively.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

Caltrans QA Lumley informed ZPMC QC Don Yao Fei of the internal deficiencies and Non-Compliant work of the internal surfaces and repairs of Lift 3 West.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
